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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ZANELLI, MICHAEL J

ART UNIT

PAPER NUMBER

3661

DATE MAILED: 04/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/776,033

Applicant(s)

BANET ET AL.

Examiner

Michael J. Zanelli

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 21-24 is/are rejected.
- 7) ☒ Claim(s) 19 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6,9. 6) ☐ Other: _____

DETAILED ACTION

1. This application has been examined. The preliminary amendment filed 8/29/01 has been entered. Claims 1-24 are pending.
2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because: The declaration lists two applications for which priority under 35 USC 120 is claimed; however, the specification merely refers to these applications as "related". Also the transmittal papers do not identify this application as a "Continuation". Further, the specification refers to a provisional application 60/222,152; however, this priority document is not listed in the declaration or mentioned in the transmittal papers.

3. The IDS filed 9/26/01 (corrected) and 12/27/01 have been considered.
4. Claims 4 and 5 are objected to because of the following informalities: In claim 4, line 3 "on" should be "one". Claims 5 depends from claim 4 and thus incorporates this deficiency. Appropriate correction is required.
5. Claims 21-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. As per claim 21, at line 9 "the data packet from the sensor" lacks antecedence. Note that lines 4-6 establish that the microprocessor generates the data packet, not the sensor. The sensor provides data to the microprocessor to be processed into a data packet.

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B. All claims depending from a rejected base claim are also rejected as containing the same deficiencies.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

7. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Tibbals, III (5,343,906).

A. As per claim 1, Tibbals discloses a system (Fig. 4) and method for monitoring the emissions of a vehicle in which at least one sensor (80) disposed in the vehicle exhaust system provides emissions data (78) through an interface (76) to a microprocessor (28). The data is processed by the microprocessor and transmitted through a series of interfaces to a central data collection facility (82). The interface(s) for transferring the emissions data from the vehicle to the central facility may include a wireless transmitter in the form of an optical coupling (see Fig. 6b).

B. As per claim 2, the sensor data is transferred to the vehicle computer through an interface (Fig. 4).

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- C. As per claim 3, as above wherein the emission sensor may be any one of a plurality of gas-sensitive sensors (col. 3, lines 46-52).
- D. As per claim 4, as above wherein the sensor may include an oxygen sensor (col. 3, lines 48-51).
- E. As per claim 5, as above wherein the sensor is located in the exhaust pipe of the vehicle (col. 3, lines 46-48).
8. Claims 1-5 are further rejected under 35 U.S.C. 102(e) as being anticipated by Lang et al. (6,295,492).
- A. As per claim 1, Lang discloses a system and method for monitoring, collecting and transferring vehicle diagnostic data to a remote location wherein the diagnostic data may include emission data (Figs. 1,2). A translating means receives vehicle diagnostic data from the vehicle's OBD-II connector plug. The diagnostic data may include emission readings such as O₂, NO₂ and CO. An on-board computer receives the data from the translating means and provides it to a wireless communication means for transmission to a remote host for further processing (see col. 2, lines 6-41)
- B. As per claim 2, as noted above wherein the sensor data is obtained from the vehicle's OBD-II connector plug (col. 2, lines 24-27).
- C. As per claims 3-5, as above wherein gas-sensitive sensors are disposed in the vehicle's exhaust system to detect O₂, NO₂ and CO levels (see Figs. 1,2).
9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 6-16 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang et al. (6,295,492) in view of EP 0816820A2 (hereinafter EP).

A. As per claims 6 and 21, Lang is applied as above. It appears from the disclosure of Lang that the emissions are analyzed at the vehicle and the analyzed data is transmitted to the remote computer for storage and display. Claims 6 and 21 receive the emission data and analyze it at the remote host computer.

B. EP discloses a method of analyzing vehicle emission data which is downloaded from a vehicle. The analyzer may include a computer model which estimates emissions over a predefined test period and displays the results (see 3, lines 42-47). One of ordinary skill in the art would have recognized that the functions performed on the emission data could have been carried out on the vehicle or at the remote host computer wherein the obvious advantage of using the host computer is greater computing power

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and data storage as well as the ability to compare emission data with similar make and model vehicles.

C. As per claims 7-12, as above wherein EP discloses using mathematical models to estimate emissions over a given test period. Both Lang and EP disclose off-board computers/analyzers with data storage capabilities for accumulating emissions data for further analysis.

D. As per claims 13-16, as above wherein Lang teaches making the emission data available over a central network server connected to a wide area network such as the Internet.

E. As per claims 22-24, note comments above for claims 2-4.

12. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang and EP as applied to claim 6 above, and further in view of RD 422061 A (hereinafter RD).

A. As per claims 17 and 18, Lang and EP are applied as above. Claims 17 and 18 differ in that a data packet is sent from the host computer back to the vehicle and a signal is generated for application to at least one microcontroller.

B. RD discloses a remote diagnostic system in which a web browser of a vehicle computer is directed to a vehicle diagnostic website. Upon contacting the website, a command is sent back to the vehicle to request diagnostic trouble codes from each electronic control unit in the vehicle. One of ordinary skill in the art would have found it obvious to combine the teachings of RD with the teachings of Lang and EP because it would have allowed the remote computer to request and obtain additional data from the vehicle if required to perform the diagnostic analysis.

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13. Claims 19 and 20 are distinguishable over the prior art of record. As per claim 19, the prior art does not show or reasonably suggest, in combination with the other claimed subject matter, sending a second data packet from the host computer over an airlink to the wireless communications system and then to the data collector/router disposed in the vehicle wherein a signal is generated therefrom and processed by a microcontroller to adjust a property of the microcontroller. Dependent claim 20 is distinguishable for at least the same reason.

14. Claims 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references represent the general state of the art.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Zanelli whose telephone number is (703) 305-9756. The examiner can normally be reached on Monday-Thursday 5:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William A. Cuchlinski can be reached on (703) 308-3873. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

/mjz
March 25, 2002


MICHAEL J. ZANELLI
PRIMARY EXAMINER